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TO:

Docket Control

FROM:

Ernest G. John

DOCKETED BY

AZ CORP COMMISSION DOCUMENT CONTROL

Director

Utilities Division

DATE:

December 10, 2002

RE:

STAFF REPORT FOR NAVOPACHE ELECTRIC COOPERATIVE, INC.,

APPLICATION FOR FINANCING APPROVAL.

DOCKET NO. E-01787A-02-0822)

Attached is the Staff Report for Navopache Electric Cooperative, Inc., application for a Financing Approval. Staff recommends approval.

EGJ: JHJ: rdp

Originator: J. H. Johnson

Attachment: Original and fifteen copies

Service List for: Navopache Electric Cooperative, Inc.

Docket No. E-01787A-02-0822

Paul R. Michaud, Esq. MARTINEZ & CURTIS, P.C. 2712 North Seventh Street Phoenix, Arizona 85006-1090 Attorneys for Applicant

Dennis Hughes, Manager of Energy Services NAVOPACHE ELECTRIC COOPERATIVE, INC. Post Office Box 308 Lakeside, Arizona 85929

Christopher C. Kempley, Esq., Chief Counsel Legal Division Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

Ernest G. Johnson, Esq., Director Utilities Division Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

Lyn Farmer, Esq., Chief Administrative Law Judge Hearing Division Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007

STAFF REPORT UTILITIES DIVISION ARIZONA CORPORATION COMMISSION

NAVOPACHE ELECTRIC COOPERATIVE, INC.

DOCKET NO. E-01787A-02-0822

APPLICATION FOR A FINANCING APPROVAL

DECEMBER 2002

STAFF ACKNOWLEDGMENT

The Staff Report for Navopache Electric Cooperative, Inc., (DOCKET NO E-01787A-02-0822), was the responsibility of the Staff members listed below. J. H. Johnson was responsible for the financial review and analysis of the Company's application. Ray Williamson was responsible for the engineering and technical analysis.

J. H. JOHNSON PUBLIC UTILITIES ANALYST III

RAY WILLIAMSON
UTILITIES ENGINEER (ELECTRICAL)

EXECUTIVE SUMMARY

Navopache Electrical Cooperative, Inc. ("Navopache" or "Cooperative") is a non-profit Arizona corporation providing electrical service to approximately 30,000 members in the counties of Apache, Navajo, Greenlee, and Gila in Arizona. The Company also provides electrical service in Catron County, New Mexico. The total service area is approximately 10,000 square miles.

The Cooperative filed requesting authorization to obtain a twenty-year \$3,145,000 loan to finance photovoltaic generating facilities in compliance with the Arizona Corporation Commission's Environmental Portfolio Standard which requires regulated utilities to generate or otherwise acquire a portion of retail energy sales from renewable energy sources.

The Rural Utilities Service ("RUS"), an instrumentality of the United States of America, has approved the loan at an estimated average rate of five (5) percent per annum and will utilize existing collateral as security for the loan.

The Cooperative last filed a rate case in 2001 and was awarded rates in Decision No. 64293, dated December 28, 2001.

The pro forma times interest earned and debt service coverage ratios for Navopache are 1.16 and 1.50, respectively, for a year ended December 31, 2002. Both ratios indicate sufficient debt servicing capacity for present and proposed debt.

Staff recommends approval of the request for authorization to borrow funds from RUS.

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E-01787A-02-0822

ENGINEERING REPORT

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ENGINEERING REPORT

Navopache Electric Cooperative, Inc. Docket No. E-01787A-02-0822 Page 1

Introduction

Navopache Electrical Cooperative, Inc. ("Navopache" or "Cooperative") filed an application on November 4, 2002, for authorization to borrow \$3,145,000 for a period of twenty years.

Navopache is an Arizona non-profit corporation owned by its members. The Cooperative serves approximately 30,000 member-customers over 2,855 miles of distribution and transmission line within its 10,000 square mile service area. The service area includes Navajo, Apache, Greenlee, and Gila Counties in Arizona and member-customers in Catron County, New Mexico. Navopache is currently an all-requirements wholesale power contract customer of Public Service Company of New Mexico.

Notice of the proposed financing was published in the White Mountain Independent on November 26, 2002, in the Magdalena Mountain Mail on November 25, 2002, in Pine Graphics on November 22, 2002, in The Apache County Reporter on November 27, 2002, and in The Fort Apache Scout Newspaper on November 26, 2002. Affidavits of publication from the publishers were provided to Staff.

The Cooperative's current rates were established in Decision No. 64293, dated December 28, 2001.

Purpose of Financing

Navopache will use loan funds to finance construction of photovoltaic electric generating facilities to comply with the Arizona Corporation Commission's ("Commission") Environmental Portfolio Standard that was adopted in Decision No. 62506, dated May 4, 2000. The Environmental Portfolio Standard requires regulated utilities to generate or otherwise acquire a minimum of 0.2 percent of their total retail energy sales from renewable energy sources starting in 2001 with the percentage increasing steadily and leveling out at 1.1 percent in 2007 through 2012.

Navopache's Construction Work Plan Amendment for construction of photovoltaic electric generating facilities was approved by the Rural Utilities Service ("RUS"), United States Department of Agriculture. The Amendment provides for expenditures of \$3,145,000 for construction. The Cooperative will install photovoltaic generating facilities on five existing sites within fenced substation sites, at a regulator station, and within an existing structure at Blue Ridge High School.

Proposed Debt

RUS has approved financing for \$3,145,000 for a period of twenty years with a variable interest rate that is expected to average five percent per annum. Details of the variable rate loan were not given. The loan is expected to require monthly payments of \$20,755.61 for a period of

Navopache Electric Cooperative, Inc. Docket No. E-01787A-02-0822 Page 2

240 months. Final documents have not been prepared but will be submitted to the Commission within 30 days of execution and loan closing.

As security for the loan, RUS will utilize existing collateral pledged in conjunction with predecessor extensions of credit. The note will be secured by a security agreement in unspecified assets, dated October 4, 1974, and amended from time to time by Navopache and the United States Department of Agriculture.

Financial Analysis

Staff's analysis of the Cooperative's financial strength is based on a balance sheet, dated August 31, 2002, and an annualization of the revenues and expenses for the first eight months of 2002, which reflect rates authorized by Decision No. 64293, dated December 28, 2001.

The attached Financial Analysis Schedule JHJ-1 presents selected financial information from the Cooperative's eight month statement and pro forma information reflecting issuance of the proposed \$3,145,000 loan at five (5) percent based on a full twenty-year amortization. Financial Analysis Schedule JHJ-1 presents operating income, debt service coverage ("DSC"), times interest earned ratio ("TIER"), cash coverage ratio ("CCR"), and capital structure data.

At August 31, 2002, the Company had long term debt of \$30,903,432. The Financial Analysis Schedule shows that issuance of the \$3,145,000 proposed loan would result in a capital structure composed of 23.3 percent short-term debt, 58.6 percent long-term debt, and 18.1 percent common equity. The Company had \$2,659,913 in cash and short-term investments at August 31, 2002.

The Cooperative had operating income of \$1,144,684 for the eight-month period ended August 31, 2002, on total revenues of \$14,491,735 as opposed to an operating loss of \$403,150 for the year 2001. Non-cash expenses for the eight-month period ended August 31, 2002, totaled \$1,505,306 giving the Company a total of \$2,649,990 available to repay interest and debt.

The Debt Service Coverage ratio ("DSC") represents the number of times internally generated cash will cover required principal and interest payments on long-term debt. A DSC greater than 1.0 indicates that operating cash flow is sufficient to cover debt obligations.

The Times Interest Earned Ratio ("TIER") represents the number of times earnings will cover interest expense on long-term debt. A TIER greater than 1.0 means that operating income is greater than interest expense.

The Cash Coverage Ratio ("CCR") represents the number of times internally generated cash will cover required interest payments on debt. A CCR of greater than 1.0 means that operating cash flow is greater than interest expense. CCR is equal to earnings before interest, taxes, depreciation, and amortization ("EBITDA") divided by interest expense.

Navopache Electric Cooperative, Inc. Docket No. E-01787A-02-0822 Page 3

The pro forma effect of the proposed \$3,145,000 loan at an average interest rate of five (5) percent per annum over twenty years is to produce a TIER of 1.16, a DSC of 1.50, and a CCR of 2.69. These pro forma ratios indicate that the Cooperative has adequate earnings and cash flow to service the proposed debt.

Engineering Analysis

The Staff Memorandum, attached, finds that the proposed capital improvements are appropriate and the aggregate cost of \$3,145,000 is reasonable. Staff further finds that the system design is reasonable for the size and scope of the individual projects.

Staff concludes that the useful photovoltaic systems spread throughout the Navopache system is an ideal way to meet the Environmental Portfolio Standard as promulgated in Commission Decision No. 62506, dated May 4, 2000.

Staff recommends authorization of the RUS guaranteed loan.

Staff Recommendations

Staff concludes that the issuance of debt in the amount of \$3,145,000 on the terms described is for lawful purposes, within the corporate powers of the applicant, compatible with the public interest, compatible with sound financial practices, and will not impair its ability to perform service.

Staff recommends the approval of Navopache's request for authorization to obtain financing on the terms and conditions described in the application in the amount of \$3,145,000 for purchase of photovoltaic equipment.

Staff further recommends the authorization to pledge assets in favor of the lender to secure the borrowings authorized.

Staff further recommends authorizing the Company to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.

Staff further recommends that the Company be ordered to file copies of all executed financing documents within 30 days of loan closure.

Navopache Electric Cooperative, Inc. Docket No. E-01787A-02-0822 Application For Financing

FINANCIAL ANALYSIS

Selected Financial Data for the Eight Months ended August 31, 2002 Including Immediate Effects of the Proposed Debt (Pro forma)

		[A]		[B]	
		8/31/2002		Pro Forma	
		8 Months		Annualized	
. 1	Operating Income	\$ 1,144,684		\$ 1,717,026	
2	Depreciation & Amort.	1,505,306		2,257,959	
3	Income Tax Expense	0		0	
4					
5	Interest Expense	881,237		1,476,952	
6	Repayment of Principal	719,287		1,172,882	
7					
8					
9	TIER ¹				
10	[1+3] ÷ [5]	1.30		1.16	
11 .	DSC				
12	[1+2+3] ÷ [5+6]	1.66		1.50	
13	Cash Coverage Ratio				
14	[1+2+3] + [5]	3.01		2.69	
15					
16 17					
18	Short Term Debt	\$7,000,000	14%	\$7,000,000	13.6%
19	Short Term Debt	\$7,000,000	1470	\$7,000,000	13.0%
20	Long-term Debt	\$30,903,432	64%	\$34,048,432	66.0%
21	20.1g to 202t	ψου,υου, τοΣ	0470	ΨΟ-1,0-10,-102	00.070
22	Common Equity	\$10,507,063	22%	\$10,507,063	20.4%
23		4		7 , ,	
24	Total Capital	\$48,410,495	100%	\$51,555,495	100.0%
25					
26					
27	¹ EBIT Interest coverage (earnings before	interest and taxes)			

MEMORANDUM

DATE: December 9, 2002

TO: Jim Johnson

Public Utilities Analyst III

FROM: Ray Williamson Ray T. W WWW SW

Utilities Engineer

RE: STAFF ENGINEERING REPORT FOR NAVOPACHE ELECTRIC

COOPERATIVE, INC. RUS GUARANTEED FFB LOAN FOR CONSTRUCTION OF PHOTOVOLTAIC ELECTRIC GENERATION FACILITIES UNDER THE ENVIRONMENTAL PORTFOLIO STANDARD (DOCKET NO. E-01787A-02-

0822)

Introduction:

Navopache Electric Cooperative, Inc. ("Navopache" or "Company"), has submitted a financing application for construction of photovoltaic electric generating facilities. Navopache is a member-owned Arizona non-profit corporation. The Company serves approximately 30,000 member-customers over 2,855 miles of distribution and transmission line within its 10,000 square mile service area. The Service area includes Navajo, Apache, Greenlee, and Gila Counties in Arizona and member-customers in Catron County, New Mexico. Navopache is currently an all-requirements wholesale power contract customer of Public Service Company of New Mexico.

Financing Application

Navopache has submitted an application for authority to borrow \$3,145,000 from the United States of America, Rural Utilities Service, Guaranteed Federal Financing Bank("RUS Loan") to finance the construction of various photovoltaic generating facilities in order to meet the Arizona Corporation Commission's ("Commission") renewable mandates in the Environmental Portfolio Standard. The long-term financing will include a maturity date that will cover a period of twenty years.

Jim Johnson Docket No. E-01787A-02-0822 Page 2

Solar Energy Program Plan

Navopache provided Staff with a copy of "Navopache Electric Cooperative Solar Energy Program Plan" which was dated August 9, 2002, and prepared for Navopache by Global Solar Energy, Inc. Included in the plan are the projects that will be financed by the RUS Loan.

The projects include the following:

Project	AC Capacity (KW)
St Johns Substation	86
Blue Ridge High School	49
Round Valley Substation	87 ·
Show Low Substation	86
Cibecue Voltage Regulation Substation	73

Navopache Project Selection Details

Navopache officials have provided Staff with the details and the logic for selection of the individual projects included in its Solar Energy Program Plan.

Navopache's major factor in determining the location of its renewable energy generating system was property ownership. With one exception, which is the Blue Ridge High School, the location of projects was decided based upon whether Navopache either owned its property, had a long-term lease on the property, or had a right-of-way on or around the property. By selecting sites where Navopache owned the property with existing infrastructure, Navopache was able to minimize the environmental issues that needed to be addressed by the Rural Utilities Service (RUS).

The Cibecue location was identified in the 1990's as a potential location for distributed generation. When the sawmill in Cibecue is in full operation, it can cause voltage support problems in Cibecue. The options are for Navopache to build a transmission line and substation or install distributed generation. Choosing the photovoltaic system as the distributed generation facility will be more economically attractive than building a transmission line and substation.

In addition to the existing Navopache-owned properties, Navopache is placing one solar generating system at the Blue Ridge High School. In addition to high visibility for the solar system, it will provide an educational opportunity for local students. Meters will be installed and students will be able to read the meters and learn about the system operating characteristics.

Staff Analysis of Project Selection

Staff agrees with Navopache's logic on project selection. By utilizing Navopache-owned property with existing infrastructure, the utility will simplify the installation of the generating system and greatly reduce system costs. In addition, the various projects will offer examples for other Arizona cooperatives to evaluate in their selection of future projects. In particular, if the

Jim Johnson Docket No. E-01787A-02-0822 Page 3

Cibecue system shows that distributed generation is a viable alternative to solving voltage problems by constructing expensive transmission lines, it may offer other cooperatives another option that could be more cost-effective than solving this problem with new expensive transmission lines.

Staff Analysis of Navopache's Solar Energy Program Plan

Staff has reviewed the Navopache Solar Energy Program Plan, which provides technical details of the individual photovoltaic projects included in the plan. The plan includes schematics of system plans, design calculations, and 20-year output projections.

Staff concludes that the system designs are appropriate for Navopache's needs and that the costs for the systems are reasonable for the size and scope of the individual projects. Staff has not made a determination of the capital improvements as "used and useful" at this time, but defers this determination until Navopache files its next rate application.

Staff concludes that the use of photovoltaic systems spread throughout the Navopache system is an ideal way to meet the Environmental Portfolio Standard. By using distributed generators in various locations and applications, Navopache employees will learn how to install, operate and maintain renewable energy systems. This "learning curve" experience will allow Navopache to prepare for additional renewable projects in the 21st Century.

Summary

Staff concludes that the photovoltaic generation systems are appropriate and the total estimated cost of \$3,145,000 is reasonable. Staff finds that the projects and their costs are reasonable and appropriate. Staff has not made a determination of the capital improvements as "used and useful" at this time, but defers this determination until Navopache files its next rate application.